ABSTRACT

The invention provides a novel adjustable mattress and pillow system and related methods in which a sensing mat positioned on the top face of a mattress affects microprocessor-controlled optimization of the contour of the mattress and a pillow based on a user's position. In one embodiment, the novel adjustable mattress and pillow system of the invention provides real time contour optimization through use of a variety of sensing techniques that make the system particularly useful in environments such as hospital critical care facilities where proper positioning of a user on a mattress and a pillow may prove important to user's health.